Home Pesticide Chemical Safety

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The label is the law: Everything you need to know is in there.

When you last applied pesticides, did you read the label fully? I'll wager you didn't. When it comes to applying home pesticides, the industry has gone to great efforts to determine proper safety margins in the application of home pesticides. You often may be provided with a pre-measured dosing bottle, and small measuring cup, or tablespoon measuring device to properly measure your chemicals for home use. Ask yourself: Did you read the label last time you applied your chemical? Did you measure the dose properly when you applied it? Did you even identify the correct pest and apply the proper chemical in the first place? If you didn't do all of the above properly, congratulations—you have just assumed all liability in the case any detrimental effects occur. The last thing you want to do is make the neighbor kids or your dog sick. It is for these reasons, that you should completely and fully read the label EVERY time you purchase and plan to use a lawn or garden chemical.

What do you do first? Identify the proper pest.

First and foremost, before any chemical is applied, you must accurately diagnose the problem you are having with your lawn or garden. Wouldn't you feel silly applying an insecticide to your yard for a brown patch which you thought was chinch bugs, only to later find out it didn't work, and what you really had was a fungal disease? You have just unnecessarily exposed your family and pets to an unwarranted dose of chemicals.

But there are so many! How do I know which one will work?

To be honest, go back and read the above paragraph again. Identifying your pest is paramount to choosing a chemical. I recommend using a targeted approach, rather than a broad-spectrum approach. By targeted, I mean to say that you should select the best chemical match to the insect or disease that you are trying to eradicate. In other words, if you are trying for instance, to kill mole crickets, look for a product that affects the least non-target insects as possible. If you are not having problems with scorpions, snakes, or spiders, why would you put out such a wide ranging pesticide? A bit of overkill, wouldn't you agree? Note that in many ways, many of these other critters are nature's own insect control devices.

Do your homework: Find the safest, most effective solution.

Okay great! Now you've identified the nasty little vermin that is attacking your prized squash plant. Now what? Are you the kind that jumps immediately to the thought "Well this chemical killed my lawn insect, I wonder if it will work on my squash plant?" Well hold on there just a minute. Don't go in with all hoses blasting lawn chemical all over your garden vegetables. And vice versa, don't try to treat your lawn with a garden chemical. Why? Simple: Not all chemicals are created equally. Whoa. Think about it. There may be little no-see-ums that your fancy bottle of chemical doesn't even affect. Were you aware that there are very few general use pesticides which are labeled for treatment of fire ants in gardens? The last thing you want to use around vegetables you eat is a fipronyl-loaded chemical or Orthene. These are nasty and you don't dare use them around food crops. Tip: Look for a safer alternative such as one containing either Spinosad or diatomaceous earth.

Pick your poison: Liquid or granular, and how do you decide?

Many people get confused in selecting the proper pesticide. Remember, that it makes no difference whether you choose liquid or granular, so long as you measure and dose properly. For proper measurements, you must first measure the area of your yard, and determine your cubic yards or square feet (depending on how your label dictates). Next you must properly set your output equipment to match the desired rate. All rate settings should be easily marked on your device, and the setting should not vibrate, move, or jitter out of place. Deciding which chemical to use is a bit trickier. Is brand "X" better than brand "Y"? Here's where you must do your due diligence. A little internet homework can definitely help you in the final decision.

Follow through. Use the least amount necessary, as the label indicates.

Easy right? Use exactly what the label recommends. No more, no less. When chemical runoff or chemical drift affects a non-target pest, it can have unintended consequences. Measure your doses to address the target with the least amount of chemical necessary. Your neighbors will thank you for not destroying their prized monarch butterfly breeding program.

Are there any concerns that I should be aware of from the City's standpoint?

As a matter of fact, yes, there are several. The City would like to remind you that it is a violation of the law for any chemical overspray to go down storm sewer drains. Residents must be diligent to not overtreat their yard to the point that runoff during a rain event reaches the storm sewers. Another related issue is over-treating into your neighbor's yard or onto the public sidewalks or streets. Both of these types of over-treatment can potentially cause runoff that enters the City's storm water drains. We therefore ask that you be diligent in properly applying all chemicals, and to please stay off of sidewalks, streets, and neighbors' yards with these applications.

Last resort? Call a professional.

In the end, it is all about restoring your comfort and convenience when outdoors. Why would you run the risk of making a mistake putting out something you aren't certain of? When in doubt, call a professional applicator. These folks are trained and tested to properly identify and treat pests of all types. And you can bet they won't confuse brown patch with chinch bugs.

Pesticide Application Safety Tips

Pesticides can enter your body through several points: ingestion, absorption, or injection. Many homeowners inadvertently expose their family by the absorption method when they treat their own lawn. For this reason, when you absolutely, positively have to do it yourself, follow these simple safety tips when applying pesticides yourself:

- 1. **Read the label.** Familiarize yourself with what you are using to the greatest degree possible.
- 2. **Protect yourself.** Wear chemical gloves and safety glasses.
- 3. **Protect others.** Keep others out of the area until your application dries.
- 4. **Protect the waste stream.** Keep chemicals off of sidewalks and streets.
- 5. **Protect your water supply.** Do not apply before a rain, unless the label explicitly says to do so.
- 6. **Protect pets.** Keep pets away from the treated area overnight.
- 7. **Reduce exposure risk.** Measure and use the proper amount.
- 8. Clean up thoroughly. Wash clothes separately from other family clothing.
- 9. **Dispose of properly.** Triple-rinse chemical bottles and application equipment. Never reuse containers. Puncture and destroy containers. By law, these **cannot be recycled.**Then dispose of in a properly certified landfill operation.
- 10. Be ready for an emergency. Tell someone else where you will be and what you are doing. Have a fresh water supply readily available should it be necessary for cleanup. Remember, not all chemicals can be washed off with water. You could actually make your situation worse.

Recommended Resources for Help

The following agencies are here to help you find the best solution to your problem. Please feel free to call on them if you have questions.

City of Lake Jackson

Brazoria County Extension Office

Brazoria County Master Gardeners

Texas Fire Ant Management Program